

ENABLING A SENDER TO CONTROL FUTURE RECIPIENTS OF AN EMAIL

BACKGROUND OF THE INVENTION

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1. Technical Field:

[0001] The present invention relates in general to improved electronic mail systems and
10 in particular to a method for enabling a sender to control future recipients of an email. Still more particularly, the present invention relates to enabling a sender to pre-select the future recipient addresses of an email if a primary recipient elects to “reply to”, “reply to all” or “forward to” for the email.

15 2. Description of the Related Art:

[0002] Networks, and in particular the Internet, provide numerous new methods of communication. A primary use of network communication is in the form of electronic mail (email). In an electronic mail, the sender designates the recipients of the email and sends the
20 email. An email address for the sender is typically included in the email and is automatically the email address registered with the service enabling the email to be sent to the designated

recipients. A recipient of an email is typically provided the option by an email reader to reply to the email. Upon requesting to reply to an email, typically a new email window is opened addressed to the sender email address.

[0003] Current email services typically utilize email reader software as an interface with the email user. Email users are provided with basic options for composing emails. For example, the sender can select the addresses of recipients of an email. The sender may carbon copy or blind carbon copy some recipients of the email. Additionally, for example, the recipient of an email is typically provided with the options of replying to the sender, replying to the sender and all other recipients, or forwarding the email to new recipients. The basic options provided by email readers to an email user are a good starting point for facilitating email communications. In the area of addressing, however, there is a need for email readers that provide senders more control over addressing in an email.

[0004] One problem with email addressing is that one person typically has multiple email accounts provided by different email services. For example, a person may have a work email address where email sent to that address is only accessible from a computer system accessing the work intranet. That same person may have a personal email address where email sent to that address is accessible via an Internet based email service. The person may send an email from the person email address to a work colleague, but the reply address in the email is the person's personal email address. Some email services allow a sender to specify a particular reply address for the sender, however such email services are limited. It would be advantageous to provide a method, system, and program for allowing a sender to pre-select a "reply to" address

for emails based on the recipient of the email or the domain name of the recipient address.

Further, it would be advantageous to provide a method, system, and program for allowing a sender to send a single email where a different “reply to” address is provided to different recipients of the email.

- 5 **[0005]** Another problem with email addressing is that once an email is sent, the sender loses control over who else may view the email. Some email services allow a sender to block a recipient from using the “reply to all” option for an email or from forwarding an email. However, blocking a recipient from sending the email to others does not provide the sender with sufficient flexibility and control over the future recipients of an email. Therefore, it would be
- 10 advantageous to provide a method, system, and program for allowing the sender to pre-select addresses if the recipient of the email selects the “reply to all” option or the “forward to” option. In particular, to solve both problems with current email addressing, it would be advantageous to provide a method, system and program for enabling a sender to pre-select the future recipient addresses of an email should a recipient of the email elect to reply to or forward the email.

SUMMARY OF THE INVENTION

[0006] In view of the foregoing, it is therefore an object of the present invention to provide improved electronic mail systems.

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[0007] It is another object of the present invention to provide a method, system and program for enabling a sender to control future recipients of an email.

[0008] It is yet another object of the present invention to provide a method, system and
10 program for enabling a sender to pre-select the future recipient addresses of an email if a primary recipient elects to respond to the email.

[0009] According to one aspect of the present invention, an email is received with at least one pre-selected future recipient at a computer system accessible to a primary recipient of
15 the email. The pre-selected future recipient is distinguishable from a sender of an email. The received email is displayed. Then, responsive to the primary recipient electing to respond to the email, a response email is automatically addressed to at least one pre-selected future recipient, such that a sender of the email controls future recipients of the email by pre-selecting at least one future recipient.

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[0010] In one embodiment of the present invention, a primary recipient may elect to

respond to the email by selecting a “reply to”, “reply to all”, or “forward to” option. The pre-selected future recipients may be further specified in the email according to which option the primary recipient selects.

5 **[0011]** When addressing the email to a future recipient, the email may be addressed directly to the future recipient. Alternatively, the email may be carbon copied or blind carbon copied to the future recipient. The actual address for the future recipient may be hidden or displayed. Additionally, the primary recipient may be allowed to select additional recipients of the response email.

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[0012] According to another aspect of the present invention, future recipients may be selected by the sender for each email or automatically selected from a database of addresses each with a pre-selected future recipient based on the primary recipient of the email. In particular, a sender may designate future recipient addresses in association with primary recipient addresses
15 within the sender’s address book. The primary recipient addresses may be individual email addresses or domain names within email addresses.

[0013] All objects, features, and advantages of the present invention will become apparent in the following detailed written description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The novel features believed characteristic of the invention are set forth in the appended claims. The invention itself however, as well as a preferred mode of use, further
5 objects and advantages thereof, will best be understood by reference to the following detailed description of an illustrative embodiment when read in conjunction with the accompanying drawings, wherein:

[0015] **Figure 1** is a block diagram depicting a computer system in which the present
10 method, system, and program may be implemented;

[0016] **Figure 2** is a block diagram depicting a distributed network system for facilitating pre-selection of email addressing by a sender;

15 [0017] **Figure 3** is a block diagram depicting an email client in accordance with the method, system, and program of the present invention;

[0018] **Figure 4** is a block diagram depicting of an address book with pre-selected future recipient addresses in accordance with the method, system, and program of the present
20 invention;

[0019] **Figure 5** is a pictorial illustration depicting a composed email with pre-selected future recipients in accordance with the method, system, and program of the present invention;

[0020] **Figure 6** is a pictorial illustration depicting a reply to an email where future
5 recipients of the email are pre-selected by the sender in accordance with the method, system, and program of the present invention

[0021] **Figure 7** is a pictorial illustration depicting a reply to an email where the “reply
to all” future recipients of the email are pre-selected by the sender in accordance with the
10 method, system, and program of the present invention;

[0022] **Figure 8** is a high level logic flowchart of a process and program for setting pre-selected future recipients in an email; and

15 [0023] **Figure 9** is a high level logic flowchart of a process and program for automatically designating the recipients of an email based on the future recipients pre-selected by the sender of the email.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0024] Referring now to the drawings and in particular to **Figure 1**, there is depicted one embodiment of a computer system in which the present method, system, and program may be implemented. The present invention may be executed in a variety of systems, including a variety of computing systems and electronic devices under a number of different operating systems. In general, the present invention is executed in a computer system that performs computing tasks such as manipulating data in storage that is accessible to the computer system. In addition, the computer system includes at least one output device and at least one input device.

[0025] Computer system **10** includes a bus **22** or other communication device for communicating information within computer system **10**, and at least one processing device such as processor **12**, coupled to bus **22** for processing information. Bus **22** preferably includes low-latency and higher latency paths that are connected by bridges and adapters and controlled within computer system **10** by multiple bus controllers. When implemented as a server system, computer system **10** typically includes multiple processors designed to improve network servicing power.

[0026] Processor **12** may be a general-purpose processor such as IBM's PowerPC™ processor that, during normal operation, processes data under the control of operating system and application software accessible from a dynamic storage device such as random access memory (RAM) **14** and a static storage device such as Read Only Memory (ROM) **16**. The operating system preferably provides a graphical user interface (GUI) to the user. In a preferred

embodiment, application software contains machine executable instructions that when executed on processor **12** carry out the operations depicted in the flowcharts of **Figures 8, 9**, and others described herein. Alternatively, the steps of the present invention might be performed by specific hardware components that contain hardwired logic for performing the steps, or by any
5 combination of programmed computer components and custom hardware components.

[0027] The present invention may be provided as a computer program product, included on a machine-readable medium having stored thereon the machine executable instructions used to program computer system **10** to perform a process according to the present invention. The term "machine-readable medium" as used herein includes any medium that participates in
10 providing instructions to processor **12** or other components of computer system **10** for execution.

Such a medium may take many forms including, but not limited to, non-volatile media, volatile media, and transmission media. Common forms of non-volatile media include, for example, a floppy disk, a flexible disk, a hard disk, magnetic tape or any other magnetic medium, a compact disc ROM (CD-ROM) or any other optical medium, punch cards or any other physical medium
15 with patterns of holes, a programmable ROM (PROM), an erasable PROM (EPROM), electrically EPROM (EEPROM), a flash memory, any other memory chip or cartridge, or any other medium from which computer system **10** can read and which is suitable for storing instructions. In the present embodiment, an example of a non-volatile medium is mass storage device **18** which as depicted is an internal component of computer system **10**, but will be
20 understood to also be provided by an external device. Volatile media include dynamic memory such as RAM **14**. Transmission media include coaxial cables, copper wire or fiber optics,

including the wires that comprise bus **22**. Transmission media can also take the form of acoustic or light waves, such as those generated during radio frequency or infrared data communications.

[0028] Moreover, the present invention may be downloaded as a computer program product, wherein the program instructions may be transferred from a remote computer such as a
5 server **40** to requesting computer system **10** by way of data signals embodied in a carrier wave or other propagation medium via a network link **34** (e.g., a modem or network connection) to a communications interface **32** coupled to bus **22**. Communications interface **32** provides a two-way data communications coupling to network link **34** that may be connected, for example, to a local area network (LAN), wide area network (WAN), or as depicted herein, directly to an
10 Internet Service Provider (ISP) **37**. In particular, network link **34** may provide wired and/or wireless network communications to one or more networks.

[0029] ISP **37** in turn provides data communication services through network **102**. Network **102** may refer to the worldwide collection of networks and gateways that use a particular protocol, such as Transmission Control Protocol (TCP) and Internet Protocol (IP), to
15 communicate with one another. ISP **37** and network **102** both use electrical, electromagnetic, or optical signals that carry digital data streams. The signals through the various networks and the signals on network link **34** and through communication interface **32**, which carry the digital data to and from computer system **10**, are exemplary forms of carrier waves transporting the information.

20 **[0030]** When implemented as a server system, computer system **10** typically includes multiple communication interfaces accessible via multiple peripheral component interconnect

(PCI) bus bridges connected to an input/output controller. In this manner, computer system **10** allows connections to multiple network computers.

[0031] Further, multiple peripheral components may be added to computer system **10**, connected to multiple controllers, adapters, and expansion slots coupled to one of the multiple
5 levels of bus **22**. For example, an audio input/output **28** is connectively enabled on bus **22** for controlling audio input through a microphone or other sound or lip motion capturing device and for controlling audio output through a speaker or other audio projection device. A display **24** is also connectively enabled on bus **22** for providing visual, tactile or other graphical representation formats. A keyboard **26** and cursor control device **30**, such as a mouse, trackball, or cursor
10 direction keys, are connectively enabled on bus **22** as interfaces for user inputs to computer system **10**. In alternate embodiments of the present invention, additional input and output peripheral components may be added.

[0032] Those of ordinary skill in the art will appreciate that the hardware depicted in **Figure 1** may vary. Furthermore, those of ordinary skill in the art will appreciate that the
15 depicted example is not meant to imply architectural limitations with respect to the present invention.

[0033] With reference now to **Figure 2**, a block diagram depicts a distributed network system for facilitating pre-selection of email addressing by a sender. Distributed data processing
20 system **100** is a network of computers in which the present invention may be implemented. Distributed data processing system **100** contains a network **102**, which is the medium used to

provide communications links between various devices and computers connected together within distributed data processing system **100**. Network **102** may include permanent connections such as wire or fiber optics cables, temporary connections made through telephone connections and wireless transmission connections.

5 **[0034]** In the depicted example, mail servers **104** and **105** are connected to network **102**. In addition, clients **108** and **110** are connected to network **102** and provide a user interface through input/output (I/O) devices **109** and **111**. Mail servers **104** and **105** may contain an electronic mail system from which clients **108** and **110** send and receive email messages through email applications, such as a mail reader, located on clients **108** and **110**. Mail readers residing
10 on clients **108** and **110** provide an interface for implementing the mail service on clients **108** and **110**. Clients **108** and **110** may be, for example, personal computers or network computers. For purposes of this application, a network computer is any computer coupled to a network, which receives a program or other application from another computer coupled to the network.

Distributed data processing system **100** may include additional servers, clients, and other devices
15 not shown. For example, email messages may be sent and received between server **104** and other servers (not shown) to distribute and receive messages from other clients (not shown).

[0035] The client/server environment of distributed data processing system **100** is implemented within many network architectures. In one example, distributed data processing system **100** is the Internet with network **102** representing a worldwide collection of networks and
20 gateways that use the TCP/IP suite of protocols to communicate with one another. The Internet is enabled by millions of high-speed data communication lines between major nodes or host

computers. In another example, distributed data processing system **100** is implemented as an intranet, a local area network (LAN), or a wide area network (WAN).

[0036] Within distributed data processing system **100**, each of client systems **108** and **110** and mail servers **104** and **105** may function as both a “client” and a “server” and may be implemented utilizing a computer system such as computer system **10** of **Figure 1**. Further, while the present invention is described with emphasis upon mail servers **104** and **105** facilitating the transfer of email, the present invention may also be performed by clients **108** and **110** engaged in peer-to-peer network communications and downloading via network **102**.

[0037] Multiple layers of protocol are implemented by mail servers **104** and **105** to transfer email to and from clients **108** and **110**. First, the text of the message is formatted with a particular protocol. This message format protocol preferably defines the message to have two parts: a header and a body. The message format protocol may use fields or Hypertext Markup Language (HTML) tags that designate addressing information. The header includes fields designating, for example, the sender address, the recipient addresses, and the date and time. For purposes of the present invention, the header fields may also include a reply to address, reply all addresses, and forward to addresses.

[0038] Second, the message is transferred in a particular protocol. The typical protocol used for message transfer is the Simply Message Transfer Protocol (SMTP). Messages are transferred between clients **108** and **110** and mail servers **104** and **105** using SMTP running over Transmission Control Protocol (TCP).

[0039] Third, the message is read through a mail reader accessible to clients **108** and

110. The user interacts with the mail reader to compose, file, search, read, and reply to email.

The mail reader may execute on clients **108** and **110** that access the user's mailbox using a protocol such as the Post Office Protocol (POP) or the Internet Message Access Protocol (IMAP). Alternatively, the mail reader may be accessible to clients **104** and **105** from the mail server on which the user's mailbox resides. Further, the mail reader may be an independent application or may be included in a Web browser.

[0040] For purposes of the present invention, mail reader preferably pre-selects the "reply to" addresses for a sender based on the recipient or domain name of the recipient address and inserts the "reply to", "reply to all" and "forward to" address in the header of the email.

Additionally, for purposes of the present invention, when a sender pre-selects the "reply to", "reply to all", or "forward to" future recipients of an email, the mail reader inserts the future recipient addresses in the header of the email. A mail reader receiving an email with pre-selected "reply to", "reply to all" or "forward to" addresses, preferably automatically designates the pre-selected address or addresses as the future recipient addresses if the recipient of the email elects one of the "reply to", "reply to all" or "forward to" options. It will be understood that while the present embodiment is described with emphasis upon the response options of "reply to", "reply to all", and "forward to", the invention may be applied to other response options. Additionally, it will be understood that while the present invention is described with emphasis upon the communication format of electronic mail, the present invention may apply in other communication formats, such as instant messaging, where the future participants in an instant messaging session may be pre-selected by the parties opening the instant messaging session.

[0041] With reference now to **Figure 3**, there is depicted a block diagram of an email client in accordance with the method, system, and program of the present invention. As illustrated, an email client **300** includes an email reader **304** and mail daemon **306**.

5 [0042] Email reader **304** also allows a user to compose, file, search and read email. Mail daemon **306** receives email intended for the user of email client **300** and stores the email in message folders **310**.

10 [0043] Email reader **304** gives mail daemon **306** messages to send to specified intended recipients. Mail daemon **306** may use simple mail transfer protocol (SMTP) running over TCP via the network to transmit the message to a mail daemon running on another machine, typically the mail server, that puts the message into a mailbox where it is retrievable by the intended recipient.

15 [0044] Address book **312** is typically a database for storing email addresses and contact information. For purposes of the present invention, the user preferably designates the “reply to” address preferred by the user for each stored email address. Additionally, the user may designate the “reply to all” and “forward to” addresses preferred by the user for each stored email address. The user may also designate “reply to”, “reply to all” and “forward to” addresses based on domain names of email addresses.

20 [0045] Email reader **304** preferably enables a sender to compose an email. Upon detecting the sender’s selection of recipients, email reader **304** designates the “reply to”, “reply to all”, and “forward to” addresses of future recipients of the email based on the sender’s pre-

selections in address book **312**. Additionally, a sender may select the “reply to”, “reply to all”, and “forward to” addresses for an individual email. Upon detecting these selections for an individual email, email reader **304** designates the addresses of future recipients of the email. The addresses of future recipients are designated in fields or HTML flags of the header of the email.

5 **[0046]** Upon receiving an email, if an intended recipient elects to “reply to”, “reply to all”, or “forward to” the email, then email reader **304** determines whether any future recipients are designated for the election. If future recipients are designated, then email reader **304** automatically inserts the future recipient addresses in the recipient field of the responsive email. The intended recipient composing the responsive email may be allowed to add additional
10 recipients beyond those pre-selected as the future recipients or the intended recipient may be limited to the pre-selections by the sender.

[0047] In one embodiment of the present invention, the components described within email client **300** are accessible within a single computer system. However, in alternate embodiments of the present invention, the components described within email client **300** are
15 accessible via multiple computer systems across a distributed network system.

[0048] Referring now to **Figure 4**, there is illustrated a block diagram of an address book with pre-selected future recipient addresses in accordance with the method, system, and program of the present invention. As depicted, address book **312** of email client **300** in **Figure 3**
20 provides a database of stored email addresses and other addressing information. For purposes of illustration, address book **312** sorts email address in three groups: business addresses **402**, friend

addresses **404** and domain names **406**. It will be understood that any type of database structure may be utilized by address book **312** to sort and store email addresses.

[0049] For purposes of example, a selection of the recipient addresses stored in business addresses **402** are depicted at reference numeral **408**. For each recipient address, a sender may select the sender address to be used as the “reply to” address dependent upon the recipient address, as depicted at reference numeral **410**. As another example, a selection of domain name addresses are stored in domain names **406**, as depicted at reference numeral **412**. For each domain name in an email address, a sender may select the sender address to be used as the “reply to” address, as depicted at reference numeral **414**. Although not depicted in the present examples, in alternate embodiments, in addition to designating a “reply to” address, a sender may designate “reply all” addresses and “forward to” addresses based on the recipient address or domain name address.

[0050] With reference now to **Figure 5**, there is depicted a pictorial illustration of a composed email with pre-selected future recipients in accordance with the method, system, and program of the present invention. As illustrated, a mail reader window **500** provides an interface for a user to compose, read, save, and perform other functions with an email. Multiple selectable buttons **504**, **506**, **508**, and **510** are provided within mail reader window **500** for the user to initiate functions of the mail reader by selecting a button with cursor **502**. For example, responsive to a user selection of compose button **504**, a composed email with selected future recipients **512** is initiated.

[0051] In the example, email **512** includes a header **511** and a body **524** of an email. In header **511**, multiple fields are illustrated. It will be understood that although the present invention is described with reference to an email with a header and body, other types of messaging protocols may be used.

5 [0052] First, a “from” field **514** designates the email address of the sender of the email. Next, a date field **515** designates the date and time the email was sent. Thereafter, a recipient field **516** indicates the recipient addresses of the current email. For purposes of illustration, each address is assigned a numerical identifier.

[0053] Next, a “reply to” field **518** designates the future recipients of the email if the
10 “reply to” option is selected by a recipient of email **512**. In the example, the “reply to” addresses are automatically entered based on the sender’s selections in the address book depicted in **Figure 4**. In an alternate embodiment, the sender may also select the set “reply to” button **506** and then select a “reply to” address.

[0054] Additionally, a “BCC reply to” field **519** designates the future recipients of the
15 email if the “reply to” option is selected by a recipient of email **512**. The “BCC reply to” is a blind carbon copy of an email when a recipient select to reply to the email.

[0055] A “reply to all” field **520** designates the future recipients of the email if the
“reply to all” option is selected by a recipient of email **512**. In the example, the “reply to all” addresses are selected by the sender specifically for email **512** by selecting the set “reply to all”
20 button **508** and then selecting specific addresses. In an alternate embodiment, the “reply to all” addresses may be automatically entered based on pre-selections made in the sender address book.

[0056] A “forward to” field **522** designates the future recipients of the email if the “forward to” option is selected by a recipient of email **512**. In the example, the “forward to” recipient list is a group name that represents multiple email addresses. The sender selected the “forward to” recipients by selecting the set “forward to” button **510** and selecting the recipient group. In an alternate embodiment, the “forward to” address may be automatically entered based on pre-selections made in the sender address book.

[0057] Referring now to **Figure 6**, there is depicted a pictorial illustration of a reply to an email where future recipients of the email are pre-selected by the sender in accordance with the method, system, and program of the present invention. As illustrated, mail reader window **600** enables the display of a “reply to” email with selected future recipients **612**. Mail reader window **600** includes multiple selectable buttons **606**, **608**, and **610** for a recipient reading an email to select with cursor **502**. In this example, the recipient josmith@us.ibm.com selects “reply to” button **606**. In response, the mail reader composes email **612**.

[0058] In email **612**, the previous text of the email is displayed and the recipient adds additional text, as indicated at reference numeral **620**. In header **611**, the address in “from” field **614** is automatically selected as the recipient email address. The recipient of an email may also set a “reply to” address different from the “from” address.

[0059] In email **612**, the email reader automatically selects the recipient in “to” field **616** as the future recipient selected by the sender if a “reply to” option is selected. The recipient may also be allowed to add additional recipient addresses or may be barred completely from

choosing recipients other than the future recipients pre-selected by the sender of the email.

[0060] Additionally, in email **612**, the email reader automatically selects the recipient in “BCC to” field **618**. Advantageously, the blind carbon copy address may be hidden from the repplier’s view or may be displayed.

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[0061] With reference now to **Figure 7**, there is illustrated a pictorial illustration of a reply to an email where the “reply to all” future recipients of the email are pre-selected by the sender in accordance with the method, system, and program of the present invention. As depicted, mail reader window **700** enables the display of a “reply to all” email with selected
10 future recipients **712**. Mail reader window **700** includes multiple selectable buttons **706**, **708**, and **710** for a recipient reading an email to select with cursor **502**. In this example, the recipient selects “reply to all” button **708**. In response, the mail reader composes email **712**.

[0062] In header **711**, the address in “from” field **714** is automatically selected as the recipient address. In addition, in header **711**, the email reader automatically selects the addresses
15 in recipient field **716** according to the “reply to all” future recipients designated by the sender.

[0063] In this example, the addresses in “reply to” field **718**, “reply to all” field **720**, and “forward to” field **722** are maintained from the sender pre-selections. Additionally, the primary recipient now sending email **712** has added the recipient’s address in “reply to” field **718**.

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[0064] Referring now to **Figure 8**, there is depicted a high level logic flowchart of a

process and program for setting pre-selected future recipients in an email. As illustrated, the process starts at block **800** and thereafter proceeds to block **802**. Block **802** depicts a determination whether a new composed e-mail is detected. The process iterates at block **802** until a new composed e-mail is detected, then the process passes to block **803**. A new composed e-mail may include an email composed as a result of selecting to compose mail and may include an email composed as a result of selecting to reply to or forward an email.

[0065] Block **803** depicts a determination whether the primary recipients of the email match address book pre-selections. If the primary recipients do not match address book pre-selections, then the process passes to block **804**. If the primary recipients match address book pre-selections, then the process passes to block **805**. Block **805** depicts automatically adding the pre-selected future recipients as designated by the sender in the address book, and the process passes to block **804**.

[0066] Block **804** illustrates a determination whether the sender requests to set the “reply to” future recipients. If the sender does not request to set the “reply to” future recipients, then the process passes to block **808**. If the sender does request to set the “reply to” future recipients, then the process passes to block **806**. Block **806** depicts adding the future recipients in the “reply to” field, and the process passes to block **808**.

[0067] Block **808** depicts a determination whether the sender requests to set the “reply to all” future recipients. If the sender does not request to set the “reply to all” future recipients, then the process passes to block **812**. If the sender does request to set the “reply to all” future recipients, then the process passes to block **810**. Block **816** depicts adding the future recipients

in the “reply to all” field, and the process passes to block **812**.

[0068] Block **812** depicts a determination whether the sender requests to set the “forward to” future recipients. If the sender does not request to set the “forward to” future recipients, then the process ends. If the sender does request to set the “forward to” future recipients, then the process passes to block **814**. Block **814** depicts adding the future recipients in the “forward to” field, and the process ends. While in the present embodiment the process allows specification of future recipients for “reply to”, “reply to all”, and “forward to” option, it will be understood that in alternate processes future recipients may be set for other options in an email.

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[0069] With reference now to **Figure 9**, there is depicted a high level logic flowchart of a process and program for automatically designating the recipients of an email based on the future recipients pre-selected by the sender of the email. As illustrated, the process starts at block 900 and thereafter proceeds to block **902**. Block **902** depicts a determination whether an email is read by a recipient. The process iterates at block **902** until an email is read, then the process passes to block **904**. Block **904** depicts a determination of whether a “reply to” is requested. If a “reply to” is not requested, then the process passes to block **906**. If a “reply to” is requested, then the process passes to block **908**. Block **908** depicts a determination whether there are “reply to” future recipients set in the email. If there are not “reply to” future recipients set, then the process passes to block **922**, described later in the process. If there are “reply to” future recipients set, then the process passes to block **910**. Block **910** depicts automatically entering the future

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recipients as the only recipients for the email, and the process passes to block **922**. In alternate embodiments, the recipient may choose to “reply to” and to “forward to” for the same email.

[0070] Block **906** depicts a determination of whether a “reply to all” is requested. If a “reply to all” is not requested, then the process passes to block **916**. If a “reply to all” is requested, then the process passes to block **912**. Block **912** depicts a determination whether there are “reply to all” future recipients set in the email. If there are not “reply to all” future recipients set, then the process passes to block **922**, described later in the process. If there are “reply to all” future recipients set, then the process passes to block **914**. Block **914** depicts automatically entering the future recipients as the only recipients for the email, and the process passes to block **922**.

[0071] Block **916** depicts a determination of whether a “forward to” is requested. If a “forward to” is not requested, then the process ends. If a “forward to” is requested, then the process passes to block **918**. Block **918** depicts a determination whether there are “forward to” future recipients set in the email. If there are not “forward to” future recipients set, then the process passes to block **922**, described later in the process. If there are “forward to” future recipients set, then the process passes to block **920**. Block **920** depicts automatically entering the future recipients as the only recipients for the email, and the process passes to block **922**.

[0072] Block **922** depicts opening and email composer window to reply to the email, and the process ends. If the email composer window, the header of the email displays any automatically selected recipients. Additionally, the replier may be enabled to specify future recipients for the reply email and a reply to address for the replier may be automatically selected

based on pre-selections by the replier for the future recipients.

[0073] While the invention has been particularly shown and described with reference to a preferred embodiment, it will be understood by those skilled in the art that various changes in
5 form and detail may be made therein without departing from the spirit and scope of the invention.